REMARKS

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding Office Action is respectfully requested.

Only claims 1 and 11 are currently amended in this paper. No new claim is added. No claim is canceled.

1. Election/Restriction

The Examiner issued a requirement for restriction to one of the following inventions under 35 U.S.C. § 121:

I. Claims 1-19, 22 and 23, drawn to a silver glass composition; and

II. Claims 20, 21 and 24-26, drawn to a method of making a silver glass.

Applicants, through their counsel, made a provisional election to the invention of Group I, claims 1-19, 22 and 23 without traverse on April 24, 2003. Applicants hereby confirm this election. As such, claims 20, 21 and 24-46 are withdrawn from the application.

2. Allowable Subject Matter

Applicants note with appreciation that the Examiner has indicated that claims 6-8, 13, 22 and 23 would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

3. Rejections under 35 U.S.C. § 102

The Examiner has rejected originally filed claims 1-5, 9 and 11 under 35 U.S.C. § 102 as being anticipated by G.E. Ridone, "The Spontaneous Growth of Silver Films on Glasses of High Silver Content," Journal of the Society of Glass Technology, Volume XXXVII, pages 124-28 (June 1953) (hereafter Ridone).

The Examiner asserted that

> Ridone discloses a batch melted silver borosilicate glass having a composition, which anticipates claims 1-5, 9 and 11. See page 125, lines 1-11. Ridone discloses a clear glass that anticipates the transparent limitation of claim 11. See page 125, lines 4-5.
>
> Since the composition of the reference is the same as those claimed herein it follows that the glasses of Ridone would inherently possess the same refractive index and attenuation properties as recited in claim 11.

Page 3 of the Detailed Action.

Applicants submit that claims 1 and 11, as amended herein, are not anticipated by Ridone.

Page 125, lines 1-11 of Ridone are reproduced as follows:

> The present work has shown that large quantities of silver oxide can be introduced into borate glasses which may contain silica and/or alumina provided that no alkali metal oxide is present. Some of the glasses are highly colored, varying from clear yellow to opaque brown. Those glasses which show the phenomenon of film formation at the surface have the following range of weight percent, compositions:
>
> Ag_2O .....5 to 60
> B_2O_3 .....30 to 85
> SiO_2 .....0 to 60
> Al_2O_3 .....0 to 20

This part of Ridone is silent on whether the silver-containing glass is essentially free of metallic silver. Indeed, Ridone does not disclose whether the silver-containing borosilicate glasses contain metallic silver in the glass composition. Disclosure of high-silver borosilicate glass in Ridone is largely limited to the above reproduced paragraph, in which a broad SiO_2 content of 0-60% is disclosed. The glasses investigated in Table I, page 125 of Ridone are all silver borate glasses, not borosilicate glasses as indicated by the title of the table. Claims 1 and 11, as amended, of the present application claims borosilicate glasses having high ionic silver content and essentially free of metallic silver.

Claims 2-5 and 9, dependent from claim 1, as amended herein, should not be anticipated by Ridone for the same reason.

4. Rejections under 35 U.S.C. § 103

The Examiner has rejected claims 10, 12 and 14-19 as being unpatentable over Ridone, supra, under 35 U.S.C. § 103.

The Examiner asserted that

> Ridone differs from the instant application by not teaching any example sufficiently specific to anticipate the compositional limitations of claims 10, 12 and 14-19.
>
> However, it is believed that the weight percent ranges disclosed by Ridone if converted to cation percent would have overlapping compositional ranges with instant claims 10, 12 and 14-19. See page 125, lines 7-11. Overlapping ranges have been held to establish prima facie obviousness.

Page 4 of the Detailed Action.

Applicants submit that claims 1 and 11, as amended herein, are not subjected to this same rejection under 35 U.S.C. § 103.

As indicated supra, claim 1, as amended, is not anticipated by Ridone inasmuch as Ridone does not teach whether its silver borosilicate glass contains metallic silver in the composition or not.

Claims 1 and 11, as amended herein, are directed to batch-melted, high ionic silver borosilicate glass essentially free of metallic silver.

Ridone does not suggest, either, that its silver borosilicate glass as disclosed therein is essentially free of metallic silver. As indicated supra, the teachings regarding silver borosilicate glass in Ridone is very general, simple and vague in nature. Ridone does not disclose the state of silver in the glass in much detail. Indeed, the disclosure as to the color of the glasses in lines 3-4, page 125, reproduced supra, indicates that metallic silver is very likely to be present in some of the glasses (and, indeed, it is unclear from Ridone whether these glasses are borosilicate glasses or merely silver borate glasses).

In lines 13-16, page 6 of the present application, it is disclosed that "[c]onsequently, although ionic silver can be introduced into the glasses described in, the '948 patent without reduction to metallic silver by low temperature ion exchange, in general it was not believed it could be introduced to the glass by melting a batch containing a silver salt." (Emphasis added). The present invention, by providing batch-melted borosilicate glasses essentially free of metallic silver and approaches for producing them, overcomes this theoretical skepticism and thus is non-obvious.

For the same reasons, claims 2-10, all dependent from claim 1, as amended herein, and claims 12-19, all dependent from claim 11, as amended herein, are not obvious over Ridone. These dependent claims may be non-obvious over the prior art for other reasons as well, such as those recognized by the Examiner in the outstanding Office Action regarding originally filed claims 6-8, 13, 22 and 23. However, since the above reasons are sufficient to establish the non-obviousness of these claims, it is unnecessary for Applicants to expound other reasons in this paper.

5. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicants believe the pending claims of the above-captioned application are in allowable form and patentable

over the prior art of record. Applicants respectfully request reconsideration of the pending claims 1-19, 22 and 23 and a prompt Notice of Allowance thereon.

Applicants believe that one-month extension of time is necessary to make this Response timely. Should Applicant be in error, Applicants respectfully request that the Office grant such further time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Response timely, and hereby authorize the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

The undersigned attorney is granted limited recognition by the Office of Discipline and Enrollment of the USPTO to practice before the USPTO in capacity as an employee of Corning Incorporated. A copy of the document granting such limited recognition is submitted herewith for the record.

Please direct any questions or comments to the undersigned at (607) 248-1253.

Respectfully submitted,

CORNING INCORPORATED

Date: September 25, 2003

Siwen Chen
Limited Recognition
Corning Incorporated
Patent Department
Mail Stop SP-TI-03-1
Corning, NY 14831

Date of Deposit: 9/25/2003

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date indicated above with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Siwen Chen

BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE
UNITED STATE PATENT AND TRADEMARK OFFICE

LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

Siwen Chen is hereby given limited recognition under 37 CFR § 10.9(b) as an employee of Corning Incorporated to prepare and prosecute patent applications in which (i) Corning Incorporated is the assignee of all right, title and interest in the invention claimed in the application; (ii) a wholly-owned subsidiary of Corning Incorporated is the assignee of all right, title and interest in the invention claimed in the application; or (iii) a joint venture of Corning Incorporated is the assignee of all right, title and interest in the invention claimed in the application. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Siwen Chen ceases to lawfully reside in the United States, (ii) Siwen Chen's employment with Corning Incorporated ceases or is terminated, or (iii) Siwen Chen ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: February 20, 2004

Harry I. Moatz
Director of Enrollment and Discipline